Email Management Services: Opportunity for the Postal Service

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Executive Summary

The U.S. Postal Service has the statutory duty to "provide postal services to bind the [n]ation together through the personal and business correspondence of the people."[1] The Postal Service has met that mission by focusing on the collection, transportation, and delivery of paper mail and packages. Over the last 15 years, however, reliance on email has grown to become a key mode of communication for both personal and business purposes. To continue to meet its mission in the context of evolving technologies, the Postal Service must modernize the products and services that it offers.

One innovation the Postal Service may consider is offering email management services, particularly to small- and medium-sized businesses. The U.S. Postal Service Office of Inspector General asked the International Center for Integrative Systems to develop models the Postal Service may want to consider in offering email management services. This analysis considered the types of services potential users of an email management system may want and how the Postal Service could leverage its existing resources to offer such services. The analysis also included high-level estimates of the revenue the Postal Service could possibly generate under these models.

The key findings of this paper are as follows:

- Offering email management services is consistent with the Postal Service's traditional role as a national communications network.

- The Postal Service may be able to leverage its existing resources and reputation as a trusted organization to provide a secure email management service.

- The Postal Service may have the potential to generate significant revenue by offering email management services.

- The revenue generation potential is based on several assumptions, which the Postal Service would need to evaluate before it pursues email management as a possible source of new revenue.

- The Postal Service faces significant challenges, both in seeking authority to offer the new service and in implementing the service.

[1] 39 U.S.C. § 101.

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Introduction

Mail volume has declined each year since peaking at 213 billion pieces in fiscal year (FY) 2006. In FY 2011, mail volume dropped to 168 billion pieces. The Boston Consulting Group projected that mail volume will continue to decline over the next several years and may reach as few as 150 billion pieces by 2020.[2] The U.S. Postal Service attributes the continuing loss of mail volume and revenue to a permanent shift to electronic alternatives. Weak economic conditions exacerbated this trend, which is expected to continue for the foreseeable future.

While paper mail volume has decreased in recent years, the use of electronic mail has increased exponentially. As demonstrated in Figure 1, the number of email messages sent outnumbered the amount of postal mailpieces sent for the first time in 1997. This reflects a significant change in the use of communications mechanisms.

Figure 1 – Growth of Email Message and Postal Mail Volume
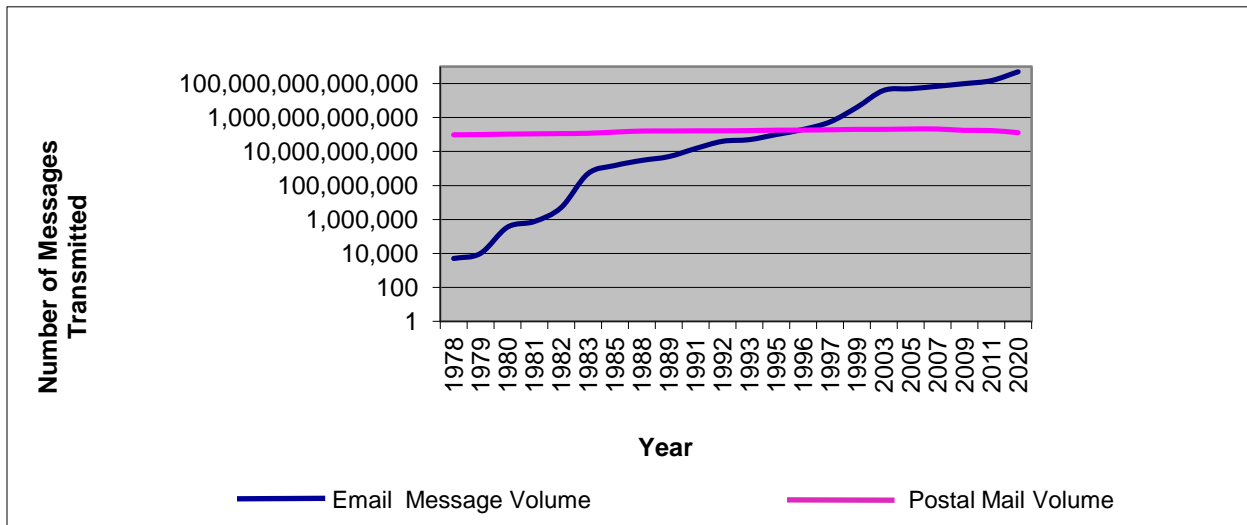
Source: International Center for Integrative Systems (ICIS).

This shift from paper to email messaging has significantly impacted the Postal Service's financial condition. In FY 2011, the Postal Service posted a net loss of $5.1 billion, which would have actually exceeded $10.5 billion, had Congress not passed a last-minute measure to delay an annual payment to the federal government of $5.5 billion.[3] The Postal Service has been unable to cut costs quickly enough to keep pace with declining mail volume and revenue or generate enough additional revenue to offset the loss. The Postal Service reported a loss of $11.6 billion through the first 3 quarters of

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[2] Boston Consulting Group, *Projecting US Mail [V]olumes to 2020 Final Report – Detail*, March 2, 2010, page 8, http://about.usps.com/future-postal-service/bcg-detailedpresentation.pdf.
[3] U.S. Postal Service, *Report on Form 10-K*, page 15 (November 15, 2011).

FY 2012. In addition, on August 1, 2012, the Postal Service defaulted on the $5.5 billion deferred payment from FY 2011 and it anticipates defaulting on another $5.6 billion payment due to the federal government on September 30, 2012.

While electronic diversion has reduced mail volume, it has also created an opportunity for the Postal Service to serve the nation and generate revenue in new and innovative ways. One such opportunity could be to offer email management services. Expanding its products and services beyond traditional mail to include email management services could help the Postal Service accommodate the evolving needs of the nation and return to financial solvency.

Background

An email management system is software that allows organizations to minimize human involvement by centrally collecting and automatically organizing, analyzing, and preparing responses to inbound email messages. Organizations also use email management systems to streamline the process of sending outbound email messages. Currently, organizations that use email management systems rely on private companies, often located overseas, for this service.

Offering email management services would be consistent with the Postal Service's traditional role of providing communication services. There may also be opportunity for the Postal Service to leverage its existing resources – including staff on 'stand-by time'[4] – and reputation as a trusted organization to provide a secure and cost-effective email management service.

Targeting small- and medium-sized businesses (SMB) may be particularly beneficial to the Postal Service, as they receive about 90 billion email messages from customers annually and few use email management services. The Postal Service also has a unique opportunity to market email management services to SMBs because postal employees have local, direct, face-to-face contact with millions of these businesses daily.

The Postal Service may have the potential to generate significant revenue by offering email management services. The revenue generation potential, however, is based on

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[4] Stand-by hours are those hours that the Postal Service pays career bargaining unit employees who are guaranteed workhours under applicable national labor agreements, even when there is insufficient work available.

several assumptions. The Postal Service would need to evaluate these assumptions and overcome several challenges before it pursues email management as a potential source of new revenue.

Postal Service's Role in Communication

Traditionally, organizations relied heavily on the Postal Service to communicate via paper mail and packages. Email messages, however, have become a key mode of communication for organizations and individuals. Because of their similar purposes and features, email is considered the electronic version of the interoffice, inter-organizational paper-based mail system. Thus, the Postal Service could play a role in providing email management services, as a natural extension of its core service offerings.

The Postal Service's Traditional Function

The Postal Service is required by law to "have as its basic function the obligation to provide postal services to bind the nation together through the personal, educational, literary, and business correspondence of the people."[5] The Postal Regulatory Commission (PRC) determined that this universal service obligation, while not specifically laid out in the law, includes the following attributes:[6]

- Geographic scope.
- Range of products.
- Access to postal facilities.
- Delivery frequency.
- Prices/affordability.
- Quality of service.
- Users' rights.

The term 'universal service obligation' has only been used since the mid-20th Century. Prior to that time, the responsibilities of the Postal Service – which was then the Post Office Department – were limited to relatively narrow and specific statutory requirements, financial capabilities, social expectations, and physical capabilities. Services focused on the collection, transportation, and delivery of letters and parcels. As political, economic, and social demands changed over time, Americans have benefited from a universal service obligation that has had the flexibility to evolve with those changes.

According to the PRC, the 'range of products' aspect of the universal service obligation is subject to change to meet the evolving needs of citizens and the varying needs for distinct products. The PRC specifically noted that "what is necessary to bind the nation together changes over time. When it does, the [universal service obligation] requires that the Postal Service respond." The Postal Service has met its universal service obligation over the past 236 years by providing a secure, reliable, universally accessible

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[5] 39 U.S.C. 101(a).
[6] *Report on Universal Postal Service and the Postal Monopoly*, page 4 (December 2008).

platform for physical commerce and communications. To accommodate the evolving needs of the nation and return to financial solvency, the Postal Service may consider expanding its products and services beyond physical mail to electronic mail services.

Evolution of Communication Mechanisms

Electronic substitution of traditional mail is accelerating as individuals and organizations adopt new technologies. Mail users are shifting from traditional hard copy distribution to a variety of new ways to communicate, advertise, or transact business, including electronic alternatives. These electronic alternatives, such as email messages, can offer greater convenience, faster service, and lower cost than traditional, paper-based communication.

Various communication formats are intended to meet certain goals. Different modes of messaging are appropriate, depending on the target audience and content of the message. These modes of messaging apply to both print and digital media. Formal messages, such as memorandums in the print world, for example, take the form of email messages in the digital world. Both memorandums and email messages are structured and usually addressed to a specific person or group. Similar to a memorandums received at work, email messages include such fields as 'to,' 'from', 'subject,' 'date,' 'body' and sometimes include attachments.

Postal Service's Evolving Role

The Postal Service has delivered letters, periodicals, catalogs, and packages across domestic and global channels for more than 2 centuries. These core competencies and assets from its traditional business operations could allow the Postal Service to deliver digital communication products as effectively as it has delivered traditional physical products. As such, the Postal Service providing email management services is a natural extension of its traditional role.

Additionally, the Postal Service could leverage its role as a trusted organization, established through its inherent oversight and law enforcement mechanisms, to offer email management services.

Postal Service as a Trusted Organization

Privacy and security are underlying concerns for users of privatized email management services. Private providers of email management services have full rights to read the content of email messages, and reuse that content for business purposes, such as advertising. Private providers also face high staff turnover and use employees with limited experience processing paper or electronic mail. Additionally, security and privacy standards vary significantly between email management service providers.

With a volume growth of email messages, organizations began creating in-house 'email call centers' and 'email marketing teams' to manage inbound and outbound email

messages. Some organizations also began outsourcing these functions with private companies, often located overseas.

The need for a trusted brand to administer these email management functions will become increasingly important as the use of email management services grows. Consumers will want to know who is processing their email messages and whether they can be trusted. Organizations, particularly SMBs, may be willing to pay a fee for email management services if there were a greater degree of assurance that their email messages were protected.

The Postal Service has established itself as a trusted brand by consistently protecting the privacy and security of paper mail. The Postal Service could leverage its brand to provide private and secure email management services, which are currently lacking, particularly for SMBs.

Postal Service's Inherent Oversight and Enforcement Capabilities

Two law enforcement organizations within the Postal Service provide oversight under federal law to help ensure secure transactions for mail processing: (1) the U.S. Postal Inspection Service (Inspection Service), a law enforcement arm, and (2) the U.S. Postal Service Office of Inspector General (OIG), a law enforcement and oversight arm. These law enforcement and oversight organizations help deter corruption as well as prevent fraud, waste, abuse, and mismanagement within the Postal Service.

The OIG investigates internal misconduct, while the Inspection Service focuses on external crimes connected to the U.S. mail system. Both organizations' law enforcement capabilities permit them to investigate crimes committed in violation of federal laws ranging from identity theft to child exploitation and contract fraud. Additionally, these organizations create partnerships and collaborate with experts to evaluate risks to the Postal Service information technology infrastructure and coordinate responses to cyber attacks.

The Postal Service's oversight mechanisms could help deter and prevent corruption and other crimes associated with email management, a protection that is currently lacking with private email service providers. The Postal Service could apply the compliance standards it developed for managing postal mail to provide oversight for email management services.

Mechanics and Operations of Email Management Systems

An email management system is software that organizations use to gather, analyze, and respond to inbound email messages and streamline the outbound email process. Email management systems minimize human involvement by centrally collecting and automatically organizing, analyzing, and preparing responses to email messages. After analyzing the content of an email message, the system may determine that it needs an actual person to review and respond to the email message. In such cases, the email

management system sends the email message to a person to read, analyze, and respond to the email message.

By automating the process for handling email messages, organizations can improve the efficiency and effectiveness of its email communication. Especially in view of rapidly evolving communication technology, timely and responsive follow-up is crucial to the success of organizations. As a result of the increased use of email messages, individuals expect faster responses from organizations. To satisfy these needs and expectations, organizations need an efficient, effective, and consistent email management system that automatically sorts, analyzes, and prepares timely responses. Providing timely and accurate responses is particularly crucial to the ability of businesses to acquire and retain customers. Many large companies, including JCPenney and Kmart, rely on email management systems to handle and respond to email messages from customers. The lack of proper email management could have a significant negative effect on organizations.

How Email Management Systems Operate

Email management systems analyze inbound email messages based on certain criteria. For example, one email management system analyzes email messages based on five properties:

1. *Attitude*

The email management system identifies certain words from the email message that indicate a particular attitude, such as 'love,' 'hate,' or 'terrible.' The email management system categorizes the attitude of the email message as negative, positive, or neutral, based on words indicating attitude.

2. *Issue*

The email management system identifies and categorizes the subject matter based on the content of the email message. Although the system provides basic issue categories, organizations can customize these categories based on their mission and operations. For example, an email management system for the Postal Service might have issue categories that include stamps, mail delivery, and financial condition. Issue categories may also change over time as new events, and potential concerns, arise.

3. *Request*

The email management system determines whether the email message includes a request for the organization to take action and, if so, the nature of the requested action.

4. *Products*

The email management system identifies specific types of products or product categories referenced in the email message. The products and product categories will also depend on the organization. For example, an email management system for the Postal Service might include product categories such as First-Class Mail, Standard Mail, or parcels.

5. *Customer Type*

The email management system collects and analyzes the content of the email message to identify customer information, including geographical and demographic information.

The email management system uses these properties to analyze each email message and determine whether it can respond to the email message using a selection of pre-written responses. If the system cannot determine how to handle the email message, it forwards the message to a person or department within the organization, who can analyze the message and respond appropriately.

Appendix A provides additional details about the specific components of an email management system.

In addition to analyzing email messages to determine an appropriate response, email management systems can review and categorize the content of email messages to help the organization:

- Better understand customer feedback. This information can be used for statistical reports and graphs, which can help an organization to make both immediate and long-term decisions. For example, data collected via an email management system may help the organization decide to improve a product that has received a high number of complaints over the past several months.

- Obtain data about those who send email messages to the organization, including their email addresses, which can be used in communications and marketing campaigns.

- Improve customer service, through timely and more thorough responses to email messages.

Figure 2 displays some of the business applications that an email management system may provide.

Figure 2 – Possible Applications of Email Management Systems
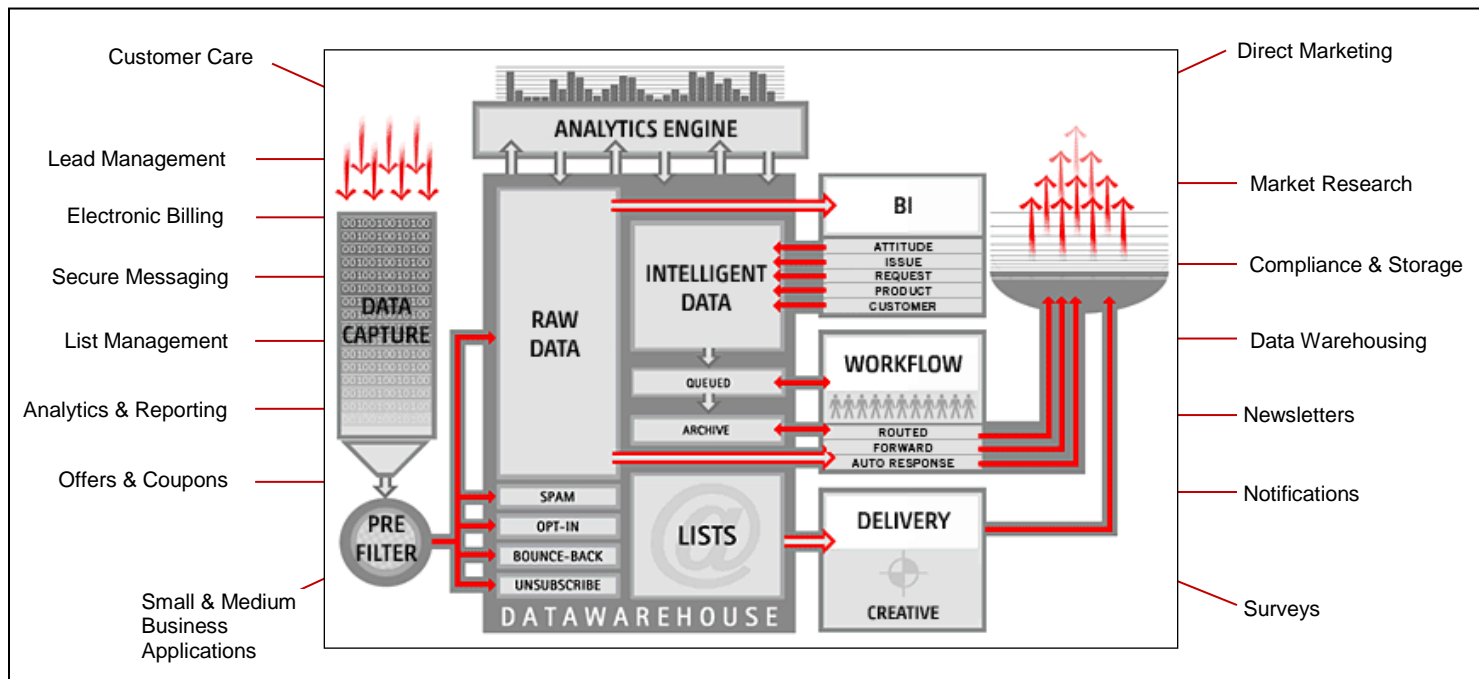
Source: ICIS.
Note: BI – Business Intelligence.

Technology Behind Email Management Systems

Implementation of an email management system requires technology architecture and infrastructure. The technology architecture needed to support an email management system generally consists of:

- User interface layer – the layer in which users interact with the email management system. This includes the login process and the ability to read, write, edit, and send responses, and view system-generated reports.

- Application layer – handles the core programs that perform data processing and calculations.

- Database layer – securely stores the data.

- Email Server layer – handles the actual transmittal of inbound and outbound email messages within the email management system.

- Security layer – a combination of hardware and software parts that maintain security of the email management system by detecting and preventing unauthorized intrusions into the system.

Email Management Service Options

The goal of an email management system is to increase the efficiency and effectiveness of processing email messages by minimizing human involvement in organizing, analyzing, and responding to email messages. Human intervention, however, may be necessary in the final stages, which requires validation and dispatching responses through the system. Email management within organizations has evolved into being handled through a blend of in house or outsourced post office-like functions. For this reason, the Postal Service may want to consider offering inbound and outbound email management services to organizations in need of the service.

We worked with the International Center for Integrative Systems to develop models the Postal Service may want to consider in offering email management services. This analysis considered the types of services potential users of an email management system may want and how the Postal Service could leverage its existing resources to offer such services. The analysis also included high level estimates of how much revenue the Postal Service could possibly generate under these models.

Inbound Email Management Services

The Postal Service may want to consider offering email management services that help organizations manage incoming email messages, as it may be an opportunity to generate additional revenue. Three possible models for the Postal Service providing email management services are: (1) tightly coupled, (2) semi-coupled, and (3) loosely coupled.

Tightly Coupled Model (Postal Service as a Service Provider)

Under this model, the Postal Service would own and manage the technology and security infrastructure and use its own employees to support the email management system. Specifically, the Postal Service could use existing employees on stand-by time to help provide the human intervention needed at the end of the process. Postal Service employees would have to undergo customized training in the areas of customer service, reading and analyzing the content of email messages, responding to email messages, and other functions needed to operate the email management system. The Postal Service could generate about 428,304 per month, or more than $5 million per year, under this model. This estimate is based on the following assumptions:

- The Postal Service could use existing employees on stand-by time to manage and support the email management system and would not have to hire additional employees.

- Postal Service employees on stand-by time could process an average of 12 email messages per hour.[7]

- The average monthly stand-by time between October 2011 and April 2012 was 35,691 hours. This estimate assumes that one-half of the monthly average stand-by hours (17,846) would be available for postal employees to provide email management services.

- The Postal Service processes 214,152 email messages per month or 2,569,824 email messages per year.

- Organizations would be willing to pay $2 per email message.[8]

- Significant costs are limited to start-up costs, such as acquisition and maintenance of the email management system technology, as well as the costs associated with configuring the information technology systems to handle the email management system. These start-up costs are not included in the estimate; so they would reduce the gross profit estimate.

Table 1 uses these assumptions to estimate the amount of revenue the Postal Service could generate monthly under this model. The top row represents the number of email messages an employee may process per hour. The first column represents the per-email message fees the Postal Service may charge to its email management service customers.

Table 1 – Gross Profit Projection for Tightly Coupled Model

Email Message Fees the Postal Service Charges	Number of Email Messages Processed by an Employee Per Hour					
Fee	7	9	11	12	13	14
$ 0.5000	$62,461	$80,307	$98,153	$107,076	$115,999	$124,922
$ 0.6575	$82,136	$105,604	$129,071	$140,805	$152,539	$164,272
$ 1.0000	$124,922	$160,614	$196,306	$214,152	$231,998	$249,844
$ 1.5000	$187,383	$240,921	$294,459	$321,228	$347,997	$374,766
$ 2.0000	$249,844	$321,228	$392,612	$428,304	$463,996	$499,688
$ 3.0000	$374,766	$481,842	$588,918	$642,456	$695,994	$749,532
$ 4.0000	$499,688	$642,456	$785,224	$856,608	$927,992	$999,376

Source: ICIS.

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[7] Without an email management system, customer service representatives can process about six email messages per hour. *Improving the Customer Experience While Reducing Operating Costs*, RightNow Technologies, page 32 (2009), http://www.rightnow.com/files/analyst-reports/RightNow_Multi-Channel_Contact_Center_Benchmark_Report.pdf. Email management systems can double or triple the number of email messages that an average customer service representative can process hourly. Thus, we can conservatively assume that a Postal Service employee using an email management system could process at least 12 email messages per hour.

[8] The Postal Service could reasonably expect that customers would be willing to pay $2 per email message because it is more cost-effective than the approximate $3.50 it costs, on average, for each customer contact without an email management system. *Cost Structure and Distribution in Today's Contact Centers*, Strategic Contact, Inc., page 8 (2008), http://www.strategiccontact.com/pdf/CC_Cost_WP.pdf.

Assuming Postal Service employees on stand-by time could process an average of 12 email messages per hour and the Postal Service could charge $2 per email message, the Postal Service may be able to generate approximately $428,304 per month, or more than $5 million per year in revenue (see highlighted cell in Table 1).

Semi-Coupled Model (Postal Service and Contractors as a Service Provider)

Under this model, the Postal Service would own and manage the technology and security infrastructure. The Postal Service would need to use 119 call center representatives to process the same number of email messages monthly as under the tightly coupled model, which assumes 17,846 hours of available stand-by time. This number is calculated by dividing 17,846 hours of available stand-by time by 150 hours per month that each call center representative could work. This totals 119 call center representatives.

The call center representatives would have to undergo customized training in the areas of customer service, reading and analyzing the content of email messages, responding to email messages, and other functions needed to operate the email management system.

The Postal Service could generate an estimated $46,043 per month, or more than $550,000 per year, under this model. This estimate is based on the following assumptions:

- Each call center representative is available to work 150 hours a month, after considering vacation, holidays, and other absences.

- The fully-loaded cost for each call center representative is $21.42.[9]

- Each call center representative using an email management tool could process up to 12 email messages per hour.

- Call center representatives process 214,152 email messages per month or 2,569,824 email messages per year. Organizations would be willing to pay $2 per email message.

Table 2 uses these assumptions to estimate the amount of gross profit the Postal Service could generate monthly under this model. The top row is the number of email messages a call center representative may process per hour. The first column shows fee per email for email management service the Postal Service may charge.

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[9] The fully loaded cost for a customer service contact is $3.57. *Cost Structure and Distribution in Today's Contact Centers*, Strategic Contact, Inc., page 8 (March 2008), http://www.strategiccontact.com/pdf/CC_Cost_WP.pdf. Typical customer service representatives can process six email messages per hour, which equates to an hourly rate of $21.42. *Improving the Customer Experience While Reducing Operating Costs*, RightNow Technologies, page 32 (2009), http://www.rightnow.com/files/analyst-reports/RightNow_Multi-Channel_Contact_Center_Benchmark_Report.pdf.

Table 2 – Gross Profit Projection for Semi-Coupled Model

		Number of Email Messages Processed by a Call Center Representative per Hour					
	Fees	**7**	**9**	**11**	**12**	**13**	**14**
Email Message Fees the Postal Service Charges	$ 0.5000	$ (319,800)	$ (301,954)	$ (284,108)	$ (275,185)	$ (266,262)	$ (257,339)
	$ 0.6575	$ (300,125)	$ (276,657)	$ (253,190)	$ (241,456)	$ (229,723)	$ (217,989)
	$ 1.0000	$ (257,339)	$ (221,647)	$ (185,955)	$ (168,109)	$ (150,263)	$ (132,417)
	$ 1.5000	$ (194,878)	$ (141,340)	$ (87,802)	$ (61,033)	$ (34,264)	$ (7,495)
	$ 2.0000	$ (132,417)	$ (61,033)	$ 10,351	$ 46,043	$ 81,735	$ 117,427
	$ 3.0000	$ (7,495)	$ 99,581	$ 206,657	$ 260,195	$ 313,733	$ 367,271
	$ 4.0000	$ 117,427	$ 260,195	$ 402,963	$ 474,347	$ 545,731	$ 617,115

Source: ICIS.

Assuming call center representatives could process an average of 12 email messages per hour and the Postal Service could charge $2 per email message, the Postal Service may be able to generate $46,043 per month, or more than $550,000 per year in revenue (see highlighted cell in Table 2).

Loosely Coupled Model (Postal Service-Branded System)

Under this model, the Postal Service would leverage its brand name and reputation as a trusted service provider to offer a Postal Service-branded email management system. The Postal Service could contract with a team of information technology staff to monitor and maintain the technology infrastructure and security components of the system. Neither Postal Service employees nor current call center representatives would be involved in the email management system under this model.

The Postal Service could generate an estimated $22.5 million per month, or $270 million per year, under this model. This estimate is based on the following assumptions:

- There are 10 million SMBs in the U.S.,[10] each of which receives on average 25 customer service inquiry email messages per day.

- The total monthly market for email message management is 7.5 billion email messages.[11]

- The Postal Service could charge its customers $2 per email message.

- The Postal Service could receive 30 percent of the revenue generated under a revenue sharing agreement.[12]

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[10] Consistent with the IRS, small and medium businesses in this model are assumed to be those with less than $10 million in assets.
[11] This estimate is based on 10 million small and medium businesses in the U.S. that receive 25 customer service inquiry email messages per day, or 750 email messages monthly.

- The Postal Service is able to capture 0.5 percent of the total market share of the SMBs email messages in the U.S.

- Service provider will process 37.5 million email messages per month or 450 million email messages per year.

In Table 3, the top row represents possible percentages of SMB market share the Postal Service may be able to capture. The first column is the estimated per email message fee the Postal Service could charge its customers.

Table 3 – Gross Profit Projection for Loosely Coupled Model
(in Millions)

	Percentage of SMB Email Management Market the Postal Service Could Acquire as Market Share					
Fees	**0.12 %**	**0.25 %**	**0.50 %**	**0.60 %**	**0.75 %**	**1.00 %**
$ 0.5000	$ 1.35	$ 2.81	$ 5.66	$ 6.75	$ 8.44	$ 11.25
$ 0.6575	$ 1.78	$ 3.70	$ 7.40	$ 8.88	$ 11.10	$ 14.79
$ 1.0000	$ 2.70	$ 5.63	$ 11.25	$ 13.50	$ 16.88	$ 22.50
$ 1.5000	$ 4.05	$ 8.44	$ 16.88	$ 20.25	$ 25.32	$ 33.75
$ 2.0000	$ 5.40	$ 11.25	$ 22.50	$ 27.00	$ 33.75	$ 45.00
$ 3.0000	$ 8.10	$ 16.88	$ 33.75	$ 40.50	$ 50.63	$ 67.50
$ 4.000	$10.80	$ 22.50	$ 45.00	$ 54.00	$ 67.50	$ 90.00

(Note: The "Fees" column is labeled along the left edge as "Per Email Message Fees")

Source: ICIS.

Assuming the Postal Service could capture 0.5 percent of the total market share and arrange a 30 percent revenue sharing agreement, the Postal Service could generate approximately $22.5 million per month, or $270 million per year (see the cell highlighted in Table 3).

Outbound Email Management Services

In addition to assisting organizations in managing their inbound email messages, there may be an opportunity for the Postal Service to generate revenue by offering services that would manage organizations' outbound email messages. Specifically, the Postal Service could assist organizations by providing targeted marketing email messages and other email communications to specific people through an outbound email management service. Similar to the loosely coupled model, the Postal Service could leverage its brand name and reputation as a trusted service provider. The Postal Service could contract with a team of information technology staff to monitor and maintain the technology infrastructure and security components of the system.

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[12] Revenue sharing agreements at the rate of 30 percent is standard among most distribution agreements in the software and services industry (http://softwareceo.com/forum/thread/1296/Commission-rate-for-1099-sales-agents/).

The Postal Service could generate an estimated $250 million per year by offering outbound email management services. This estimate is based on the following assumptions:

- A typical SMB would be willing to pay $0.02 per outbound email marketing message delivered through an email management system.[13]

- SMBs send about 250 billion marketing email messages per year.[14]

- The Postal Service could acquire 5 percent of the total SMB market share.

Challenges in Offering Email Management Services

While the opportunity for the Postal Service to offer email management services may help it meet its mission in the context of evolving communications mechanisms and generate additional revenue, the Postal Service will likely face several challenges in pursuing it as a new product. Understanding and addressing these challenges will be critical to the Postal Service's ability to pursue email management services as a new service and in deciding which model has the best chance for success.

Legal

The Postal Service may be prohibited from offering email management services, under the law that prevents it from providing 'non-postal' products and services.[15] The PRC is responsible for making a determination as to whether a potential new product or service would be considered 'non-postal.' The definition of "postal" services under the law may need to be expanded to include email management services, if the PRC determines that the service is 'non-postal.' Such a change to the law may be difficult, as Congress has raised concerns about the Postal Service's past efforts to enter into the digital arena through new products and services.[16]

In April 2012, however, the U.S. Senate passed the 21st Century Postal Service Act of 2012, which includes a provision that would allow the Postal Service to provide non- postal products and services under certain criteria.[17] Specifically, the Postal Service would be allowed to offer non-postal products and services that:

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[13] Currently, private marketing companies charge about $0.02 for each electronic marketing message. See *Advisor Marketing the Right Way in the 21st Century*, Financial Advisor (April 16, 2012), http://www.fa-mag.com/online-extras/10619-advisor-marketing-the-right-way-in-the-21st-century.html?tmpl=component&print=1&page=; and *Mobile Marketing: Web Marketing You Can't Afford to Ignore*, Benchmark Email (June 29, 2011), http://www.benchmarkemail.com/blogs/detail/mobile-marketing-web-marketing-you-cant-afford-to-ignore.
[14] This is based on multiplying the 10 million SMBs in the U.S. by the estimated 25,000 marketing email messages SMBs send annually.
[15] P.L. 109-435, Section 102.
[16] *Update on E-Commerce Activities and Privacy Protections*, Government Accountability Office (GAO) (2001), page 17; *Financial Challenges Continue, with Relatively Limited Results from Recent Revenue-generation Efforts*, GAO (2009), page 9.
[17] S. 1789, *21st Century Postal Service Act of 2011*, Section 209.

- Use the processing, transportation, retail network, or technology of the Postal Service.

- Are consistent with the public interest and a demonstrated or potential public demand for the Postal Service to provide the services instead of another entity providing the services or in addition to another entity providing the services.

- Do not create unfair competition with the private sector.

- Have potential to improve the Postal Service's net financial position.

This bill has not yet been considered in the House, but inclusion of this provision in a Senate-passed bill indicates that the Postal Service may have the opportunity in the future to offer digital products and services, such as email management services.

Regulatory

The Postal Accountability and Enhancement Act (PAEA) limits Postal Service's authority to offer non-postal products and services to those that were offered as of January 1, 2006.[18] Therefore, under PAEA, the only new products and services Postal Service can offer are those that are considered 'postal' products and services. If the PRC classifies the email management service as 'non-postal,' the Postal Service would not be able to offer this service. If the PRC classifies email management service as "postal," the Postal Service would need PRC approval to add this new service to the competitive products list.[19]

Union

The Postal Service would likely need to negotiate changes to the collective bargaining agreements with its unions to include a new job description or changes to existing positions that would allow employees to perform work related to email management services. Collective bargaining agreements involve complex negotiations and require significant time and resources to reach agreement. Introducing a new service, as well as changing the roles and responsibilities of Postal Service employees would likely be particularly challenging.

Cultural

Although the Postal Service culture has become more receptive towards changing market demand, it remains one of the greatest challenges to implementing innovative solutions. Therefore, there must be an ongoing effort to educate postal management and employees on the benefits of embracing emerging technologies and more efficient and effective operations.

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[18] S. 1789, *21st Century Postal Service Act of 2011*, Section 209.
[19] 39 U.S.C. § 3642(a).

Proposed Next Steps

The estimated revenue generation opportunities for the Postal Service are based on several assumptions about the potential market for an email management system, customers' willingness to pay for the service, and associated costs to provide the service. Before it pursues any of these options, we recommend the Postal Service conduct in-depth analysis of the opportunities to provide email management services, including the potential to generate revenue. We also recommend the Postal Service closely coordinate with stakeholders to address the aforementioned challenges identified above as it moves forward in conducting additional research, and potentially implementing an email management system.

Proposed Research and Experiments

To help validate some of the assumptions made above, and to ultimately determine whether this is an opportunity to pursue, the Postal Service should conduct its own independent research and experiments. Before conducting research and experiments, the Postal Service should ensure the following:

- A platform is available to conduct the experiment in a secure and controlled environment.

- Infrastructure for deploying an email management platform is available without major costs to the Postal Service, such as a cloud-based system.

- The Postal Service is able to acquire or build business relationships with target SMBs for the experiments.

- Employees at selected post offices are available to receive training to learn the email management platform.

These experiments are intended to test whether SMBs would be interested in using the Postal Service to:

- Deliver direct print and electronic marketing messages to their customers;

- Manage inbound email messages from customers; or

- Manage inbound email messages from customers and provide outbound email marketing services.

Through these experiments, the Postal Service should obtain an understanding of:

- Acquisition costs of SMBs as customers for the service.

- The types of businesses that would most likely adopt the service.

- Fees that SMBs would be willing to pay for the service.

- Associated costs to train and deploy Postal Service employees for the service.

Coordination with Stakeholders

The Postal Service will likely face significant obstacles in pursuing the ability to offer email management services. Thus, the Postal Service should closely coordinate with stakeholders to address these challenges as it moves forward in conducting additional research and potentially implementing an email management system.

Conclusion

An opportunity may exist for the Postal Service to generate additional revenue by offering email management services as an extension of its traditional role as a communications network provider. In this report, we have considered several approaches the Postal Service could take in offering an email management service. These deployment options and potential revenue estimates are based on several assumptions that it would need to validate before pursuing email management as a new service offering. As next steps, we recommend the Postal Service conduct experiments and gather additional market data to validate the assumptions, as well as identify solutions for the challenges discussed in the report.

Appendix A: Components of an Email Management System

Effective email message management includes the following components:

1. Data Collection: Receive and store inbound email messages for further process.

2. Prefiltering:

   - Filter collected email messages in accordance with the established parameters.

   - Send email messages with unwanted content into a SPAM folder.

   - Store undeliverable email messages – also known as bounce-back' and unsubscribe requests – in other folders.

3. Raw Email Data:

   - This is a holding queue for all the email messages that need to be processed further.

   - If necessary, additional tags may be added to each email message for further processing.

   - It may also include the ability to connect to remote databases and retrieve specific information about the email author and associated email transactions with the organization.

4. Intelligent Analysis Module (Business Intelligence):

   - This module reads the raw email message data and analyzes the subject, content, attachments, and tags added by the data enhancement module.

   - The module uses the following five criteria for the analysis:

     o Attitude: Positive, negative, or both and may be neutral.

     o Issue: The key issues in the email message. For example, damaged product, inaccurate billing, and so forth.

     o Request: A request for information such as annual report.

     o Product or Object of Interest: The key product or object of issue, for example, shoe, umbrella, sofa, and so forth.

     o Customer Type: Specific information about the customer such as gender and job title.

- This module may store this 'intelligence' as 'Intelligent Data' tagged on to the email message.

5. Workflow module:

   - Determines which department(s) or person(s) in the organization are best suited for taking action for a particular email message.

   - This module can also use the intelligent 'tags' to select a standard response for review by customer service personnel.

6. Customer Service Personnel:

   - Work through the workflow module to process email messages.

7. Archival module:

   - Stores every email message received and processed a database.
   - The database allows easy searching of past email messages.

8. Analytics module: Generates statistical reports and graphs that help the organization to make business decisions.

9. Lists Module: Creates email address lists and targeted lists for email marketing campaigns.

10. The Delivery Module: Handles two types of email messages:

   - Response to an inbound email message.
   - Email message that can be used for marketing purposes.