

DEVELOPMENT OF STRATEGIC PLAN DOCUMENT FOR USPS EMAIL MANAGEMENT SERVICE OFFERING

V.A. Shiva Ayyadurai, Ph.D.
February 7, 2012

ABSTRACT

On January 25, 2012, the USPS OIG received an intensive one-day workshop on the EMAIL and Postal Mail (as detailed in Appendix I) from Dr. V.A. Shiva Ayyadurai. This workshop was successful, resulting in USPS OIG requesting: (1) additional workshops for continued education, and (2) the creation of a detailed *Strategic Plan Document for USPS Service Offering of EMAIL Management*.

The document herein provides the proposal for the creation of such the *Strategic Plan Document for USPS Service Offering of EMAIL Management*.

I. BACKGROUND

The USPS is undergoing a disruptive period in its history. In 1997, EMAIL volume overtook postal mail volume. At that time, our conversations with senior officials at the USPS on the opportunity of the USPS offering EMAIL Management services for small and medium businesses, was not seen as relevant to the core business of USPS. With the recent events in 2011 and 2012, we resurrected our educational efforts on clarifying how the USPS could embrace EMAIL, as noted in the popular press and media, for building a suite of revenue generating services, for small and mid-market businesses. This educational effort was recognized by the Inspector General of the USPS OIG, resulting in the USPS OIG asking our assistance in organizing a one-day intensive workshop on EMAIL and Postal Mail. This workshop focused on the following areas: 1. The nature of EMAIL; 2. Why the USPS should be involved in EMAIL, since EMAIL (typically confused with text messaging) was the real electronic version of Postal Mail; and, 3. An outline of why and how the USPS could exploit EMAIL Management to derive new revenues and repurpose existing USPS workers, to save costs. This workshop resulted in the USPS OIG requesting us to create a detailed *Strategic Plan Document for USPS Service Offering of EMAIL Management (“the Plan”)*. This document herein is a proposal for the creation of the Plan.

II. DEVELOPMENT OF THE PLAN

The above *Background* summarizes the elements of our discussion with the USPS OIG at our January 25, 2012 Workshop in Cambridge, MA. Based on that workshop, the decision was made to create a formal Plan. The document detailing the Plan will consist of three major parts:

- Part I – Introduction and Context
- Part II – EMAIL Management Service Offering
- Part III – Conclusions and Next Steps

Development of Part I – Introduction and Context

We will facilitate the creation of Part I of the Plan, and will need significant content and input from USPS OIG. This will be done collaboratively by USPS OIG and us. In this Part, we expect the document to contain the following sections:

- (1) **An Overview on USPS, EMAIL and Why EMAIL Management is Being Explored**
- (2) **History of the USPS**
- (3) **Current situation and USPS plans for redefining itself**
- (4) **Context of the USPS and the unique aspects of its workforce**
- (5) **How Unions and USPS interact**
- (6) **Overview of cultural issues within the USPS**
- (7) **Past and current efforts to integrate electronic channel with postal mail**
- (8) **Statistics on Postal Mail and EMAIL usage**

Expected Time for Completing Part I: 4 Weeks

Note: This work effort can be done in parallel to the development of Part II. Both of us will retain copyright for this Part.

Development of Part II – EMAIL Management Service Offering

The creation of Part II of the Plan will be done primarily through our efforts while eliciting feedback from the USPS OIG team members. In this Part, we will provide the following elements:

- (1) **History and Definition of EMAIL** – This section will provide a detailed history of EMAIL, what EMAIL is, and how it is different from other digital text-based communication media.
- (2) **The Opportunity of EMAIL Management** – This section will describe how EMAIL has become a key mode of business communication and the emergence of EMAIL Management as a necessary and important services need. Up to three examples will be included from both large and small enterprises use of EMAIL Management. The following notes from the recent workshop provide, by way of example, provide the kind of content that will be part of this section:

The increasing use of EMAIL presents various challenges and risks for both businesses and consumers; How consumers expect faster responses from businesses to their inquiries. These consumer expectations require an efficient, effective, and consistent EMAIL Management system to sort, analyze, and prepare timely responses to satisfy consumer needs. Providing consumers timely and accurate responses is crucial to acquire new customers and to retain existing customers. While large companies have implemented EMAIL Management, such a need is also ubiquitous for millions of small and medium-businesses. The lack of proper EMAIL management system that promptly analyzes and responds to customer inquiries could have major impacts on organizations. For example, the Toyota Motor Corporation recalled approximately 8 million vehicles over two years because it did not timely assess an issue in their vehicles that was repeatedly reported by customers using EMAIL. For small and medium-businesses, ineffective EMAIL communication is resulting in billions of dollars of revenue loss and missed opportunities. While large companies can seek outsourced vendors overseas, there is not trusted outsourced vendor for EMAIL Management for the broad mass of small and medium-businesses.

- (3) **Technology for EMAIL Management.** This section will define EMAIL Management and the technology platform necessary for managing EMAIL, with key references to the technology paradigms used by large enterprises who have successfully deployed EMAIL Management. In this section, we will provide both a strategic and tactical view of the systems architecture and infrastructure necessary to

execute EMAIL Management. The following notes from the recent workshop, by way of example, provide the kind of content that will be part of this section:

Our work since 1993, beginning with the United States White House to automatically analyze and sort EMAIL resulted in the development of the world's first EMAIL Management platform including important processes for EMAIL analysis.¹ Our experience in deploying this platform across large companies provided us with a unique perspective on the needs and processes involved in EMAIL Management. The EMAIL Management solution that was deployed for those enterprises, centrally collects, analyzes, and prepares responses for EMAIL received by consumers, stakeholders, and employees. EMAIL initially goes through a filtering process with some EMAIL failing to advance. Most EMAIL goes through the process for further review and necessary actions. With an established classification process, the system analyzes the content of EMAIL and develops appropriate responses. Our approach recognized the importance of sorting incoming EMAIL based on following criteria:

- Attitude: It could be positive or negative or both or neutral.
- Issue: The key issues in the EMAIL e.g. damaged product, wrong billing, etc.
- Request: A request for information e.g. annual report, information on a product, or a job.
- Product or Object of Interest: The key product or object of issue e.g. shoe, umbrella, sofa, etc.
- Sender Type: Who is the Sender? e.g. woman, man, CEO, teacher, etc.

The system can be developed to minimize human involvement in the process. However, human intervention is desired in the final stages, which requires validation and dispatching responses through the EMAIL management system. The EMAIL Management system can also generate reports to assist the decision making process. For example: (1) Developing statistics that show the number of incoming/outgoing emails, nature of emails, demographics, trends, and responses; (2) Tracking positive/negative results of the responses; and, (3) Tracking performances by employees.

- (4) **How the Post Office May Offer EMAIL Management** – In this section we will explore how the USPS may offer EMAIL Management based on our research and observations in how large hubs of information distribution have integrated EMAIL Management services. Millions of small and medium-businesses also must contend with EMAIL. There are currently no real and trusted solutions to meet the growing needs of these businesses. In this section we will address both strategic and tactical methods in the deployment of EMAIL Management within the USPS, as well as address the various roles for the Postal Service to consider in providing EMAIL Management services for this under served market:

- The Postal Service could leverage available employees to provide EMAIL Management services for these companies.

¹ The technology resulting from the White House competition was further developed and embedded into EchoMail, the first platform for enterprise EMAIL Management.

- The Postal Service could work with a subsidiary (or partner) to provide EMAIL management services.
- The Postal Service could facilitate EMAIL management services by providing a platform for use.
- The Postal Service could use a combination of models to provide EMAIL management services as the initiative matures.

Moreover, the EMAIL Management system could provide additional Postal Service revenue opportunities by matching customer requirements with available products, such as return services. The Postal Service's established and trusted brand is an asset that could benefit EMAIL management service.

(5) **Challenges in Deploying EMAIL Management via the USPS** – In this section we will discuss the challenges to deploying EMAIL Management given the unique nature of the USPS, drawing upon content and references from Part I: The following kinds of challenges will be addressed:

- Postal Service management and culture
- Postal Service unions and constraints in negotiated agreements.
- Restrictions contained in Postal Service legislation.
- Potential to harm the Postal Service brand and goodwill.

(6) **Economics of EMAIL Management** – In this section we will provide detailed information from our experience on the costs and revenue models possible from the USPS provisioning of EMAIL Management. Within large enterprises, EMAIL Management offers significant savings in cost from increases in human productivity. For the USPS, we believe there may be additional sources of revenue by integrating EMAIL with Postal Mail for providing linked services from EMAIL e.g. Return services, Electronic and printed greeting cards, etc. Multiple scenarios and economic models will be provided.

Estimated Time for Completion: 10 Weeks

Note: The work involved in Part II can be done in parallel to Part I. We will retain the copyrights of this entire Part. However, an acknowledgement will be provided to USPS OIG for its feedback contribution to its development.

Development of Part III – Conclusions and Next Steps

We will facilitate the creation of Part III of the Plan, and we expect to work collaboratively on this Part with USPS OIG. In this Part, we expect the document to contain the following sections:

- (1) **Discussion and Conclusions** – Discussion and elaboration where relevant of the key elements from Part I and Part II including: 1. Current situation within USPS e.g. loss of revenue to third parties (FedEx, UPS), particularly in large enterprises, losses resulting from grandfather clauses, government regulations for disabled workers, and for the maintenance of idle infrastructure (e.g. empty storage facilities); 2. The slow adoption of digital technology into the USPS workflow, e.g. most branches have internet access, but minimal consumer equipment, and employees have IT/systems knowledge; and, 3. Emphasizing the underappreciated value/potential of SMB, SOHO market.
- (2) **Future Directions and Issues** – We will also discuss future directions and issues resulting from EMAIL Management including 1. How do deal with idle

infrastructure, and idle employees. A fully loaded Postal employee makes \$80,000 a year salary; 2. The problem of idle, disabled workers: some are ready and able, but have nothing to do (and so stand on the clock in “ready rooms”); others are cared for by disability laws, but are currently of little help to the USPS as able workers; 3. Suppose the USPS went head-on into the EMAIL sector: what kind of responsibility for content does the USPS have? Does transparency (and inevitably, allegiance) stay with the consumer, or business? What to do if wrongdoing is noticed in EMAIL content, and to what extent could the USPS avoid the problem of “shooting the messenger”? 4. What are the legal aspects of USPS being “man in the middle” and the potential liability of acting as a carrier for digital communication? What about the challenge of ensuring the message is “sealed against impaction”, for example? How quickly would the USPS get caught in the messy legislation of digital content/rights?

- (3) **Identification of Immediate Opportunities** – In this section we will discuss in detail based on the discussion of Part I and Part II, three immediate opportunities for EMAIL Management:
- (A) Target disabled workers in ready rooms, by providing new opportunities for at-home, computer-based work. This will need to explore how to get the unions on board, and creating the right incentives for providing training, and new offers of work, designed so as to separate those willing to work from those “riding the system”;
 - (B) To create a potential Allstate-like extranet setup, creating a network of independent contractors to help manage digital mailing throughput, with integration with existing USPS services (mailings, returns), and targeted advertising to consumers (e.g. a Groupon-like integration). Use USPS brand name as the facilitator between end users and contractors for shipments (both digital and physical). Within this, we will discuss the importance of partnerships. It’s possible to solve several major problems (ready rooms, overstock of returned goods, and loss of revenue) by creating an integrated, partnered service offering. The USPS cannot compete with UPS or FedEx in large enterprise, but it could easily target the needs of those in the SMB/SOHO market. Facilitating multimedia advertising for SMBs (paper flyers, as well as email newsletters, and even company holiday cards) could give an immediate revenue boost, and leveraging the USPS advantage on sorting and package storage management over UPS, FedEx could be a tremendous opportunity. USPS could harness the returns market (for use with forwards, returns, waste, and salvage), provide lead-ins for other services (request for returns), and make use of currently idle USPS storage facilities;
 - (C) Consider the implementation of a “USPS Portal” that can manage all incoming, and outgoing, packages and information (i.e. a USPS-driven Information Management Tool), with the ability to: 1. View and respond to incoming email; 2. Pay bills and receive billing statements; 3. Have a centralized repository for shipment information on physical packages; 4. Buy stamps, print postage; 5. Make use of a customized holiday/special occasion mailing service (and beat Facebook at the business of remembering birthdays)
- (4) **Proposal of Prototype Research Projects** - In this section, unlike just a consulting report, with findings and conclusions, we will propose 3-4 tangible research project plans. Each research project plan will map out actual research projects that can be executed in a timely and practical manner to gain real insight to some of the

unanswered questions such as: a. What's the optimal mix between human and machine? How to streamline the packaging of such a service, and how to demonstrate that new services (e.g. merchandise return, replacement, targeted advertising, pickup, or some combination), are complementary to traditional USPS offerings? What are the privacy implications of linking a physical mailing address with an email address (as would be the case on a USPS Portal)?

In Part III, for each research project, we will also provide a Summary, Methods, and Potential Research Outcomes and Budget. Our intent is that each of these research projects would lead to publication in peer-reviewed journals. Such publishing would enable the USPS to receive additional third-party research documentation to validate whether EMAIL Management is a viable offering for the USPS within the context of the USPS environment.

Estimated Time for Completion: 4 Weeks

Note: A portion of the work involved in Part III can be done in parallel to Part II. Both of us will retain copyright for this Part.

III. BUDGET AND TIMELINE

We believe the above work can be completed within 12 to 14 weeks from start for a total fixed cost budget of \$125,000.00.