



Case Study

The United States Mint: A Model for Government E-business

[by Erin Weinman](#)

[Go to the bottom of this document](#)

I. Introduction

Self-funded, profit-driven and rich in experience, the United States Mint is more than just the world's largest coin manufacturer. With over \$3 billion in annual revenue, the Mint has become a Fortune 500-sized enterprise. ¹ But this was not the case a few years ago when the Mint was experiencing trouble communicating with the Numismatic community and delivering the products they ordered. An answer to improving services came in the form of e-commerce. Key, today, to the Mint's success is the on-line catalog that regularly generates million dollar days.

II. Summary of the Problem

Nearly everyone knows the Mint manufactures coinage but few know the scale of the Mint's mail-order business. Often compared to L.L. Bean or Land's End, the Mint has distributors in 45 countries, 1.1 million (and growing) collectors and, in 1998, revenues exceeded 1 billion dollars.⁴ Mailing lists, the primary means of reaching the Mint's numismatic customer provided limited access to buyers. The only other means of reaching the public was through three retail outlets: a kiosk at Union Station in Washington, D.C. and gift shops at the Philadelphia and Denver Mints.

Despite these enviable sales numbers, "coin sales were down, less than half of customers' orders were shipped within eight weeks of purchase, and employees had picketed the agency's field office in Denver to protest management practices."² Meanwhile, at the customer-service center in Lanham, Maryland, a dysfunctional environment added to the poor service response. The center was located on the second floor in a converted warehouse that didn't have an adequate heating or air-conditioning system. Space was cramped. ⁴

Interviewed in December 1999 for a Fast Company article, Kevin Cullinane, Assistant Director for Customer Care, noted, "that type of performance would bankrupt a private company." Former Mint Director Philip Diehl added "There was no sense of urgency about the problem... or even a sense that there was a problem."⁴

Further, Diehl along with David Pickens, Associate Director for Numismatics, were strategizing on how to extend the Mint's business at a prime time when the 50 States Quarter™ Program was being launched and would most certainly generate new interest in coin collecting.

Diehl concluded the Mint needed a far-reaching collective solution to address the largest problems: poor communication channels for telling people about the Mint's products and a cumbersome system for ordering products.

III. Summary of the Solution

A. Searching for a Solution

In searching for a solution, Mint officials were surprised at the role auction websites were playing in reviving coin collecting. More specifically, statistics showed 24% of all coins purchased by collectors were bought online. In order to compete, Diehl and Pickens agreed the Mint's existing website, which was fairly sparse and mostly informational, would need to be overhauled into a dynamic e-commerce website. [4](#)

Conducting an overhaul was no small task. An organization would need to be formed, technical expertise would need to be solicited, and the new website would need to work with the recently installed enterprise resource planning (ERP) software. Additionally, the customer center needed revamping to support the anticipated influx of new orders.

The Mint established a new office, Electronic Information and Products (EIP). Headed by Joseph Hoback and supported by Evelyn Lawrence, a graphic artist, the two worked together to organize and prepare for the additional staff needed to support the coming website.

B. Cost vs. Benefit

Key to the cost savings at the Mint was the implementation of an ERP system to handle internal processes. The website would become the front-end that provided a direct link "between customers and a speedy automated internal processing system" by eliminating duplicated work.[3](#) The specific savings in processing costs was calculated around \$5 per transaction. The Mint encouraged electronic orders by waiving the \$3 to \$4 shipping and handling costs thereby passing on its savings to the customer.

C. Launching of the Website

In early April 1999, the Mint launched on-line sales at the new www.usmint.gov. The Mint recognized about \$2,000 in online sales per week. By late September 1999, online sales rocketed to \$1.4 million a week, "with up to 5,000 orders every day."[3](#) By the end of 1999, online sales accounted for 33 percent of all U.S. Mint coin sales with the average online purchase about \$90. It took, on average, 6 days to fulfill the online orders.[5](#) This past September 25, the Mint earned 5.15 million dollars in revenue on the first launch day of the 2000 Holiday Catalog and 2000 Silver Proof Sets. Total on-line sales for the first month of these programs were 21.2 million dollars with an average of 143,418 orders received.

IV. Details of the Solution

A. Driving Traffic to the Website

After establishing the EIP office and hiring several personnel, the next step was to determine how to drive customers to a website that, at the time, was primarily information based. What information/education could the Mint provide that would excite the public and make them want to come to the website on a regular basis? One answer was the design selection process for the new dollar coin.

In November 1998, 13 final designs were selected as possibilities for the new coin. The Golden Dollar team approached Diehl and the EIP group with a proposal to publish the designs on the website for public comment. Exceeding any expectations, the site received 11.7 million hits in one day (the highest number received in any one day during that year) and generated 130,000 email messages during the following couple of weeks.⁴ This energized the web group and set the stage for the e-commerce implementation.

B. The Implementation

Prior to implementing the dynamic e-catalog, the Mint was utilizing a rudimentary method for conducting on-line business. Product information was provided at random with basic photos and text. Only domestic consumer customers were served, orders were not accepted on-line, although an order form was available and there were no specific online selling strategies.

Using a phased approach to move from the basic to the dynamic online catalog, the team strived to keep the catalog regularly updated showing all currently available products with detailed descriptions and images and to maintain an archive of old products. Web-specific special offers were made to entice more customers.

The initial platform consisted of a few servers and firewalls. Over several months, seven servers (for a total of nine) were added, the system was enhanced with Secure Socket Layer (SSL) to encrypt customers' credit card information and the back-end was integrated with the ERP.⁶ The system was still not powerful enough, however, to handle the volume of orders and several problems occurred. In September 1999, Hurricane Floyd "knocked out electronic and telephone service to the Mint's Customer Care Center in Lanham, Md., for nearly 24 hours. During that time, about 1,300 orders placed through the Mint Web site were accidentally erased, and then a back-up system didn't work ..." Then, in October 1999, when the Mint launched the Connecticut quarter, the entire 7 million numismatic quarters set aside for distribution via the web were sold in 4 hours.^{3,5} Customers experienced incomplete orders, bottlenecks, and slow response times. A new architecture was needed.

This time the Mint hired Qwest Communication to help build a robust architecture. Implemented in early 2000, the new architecture contains 24 servers, several firewalls, 5 database engines, and is separated into two locations: Sterling, Virginia and Burbank, California. Load balancing servers monitor the activity and send the incoming requests to open servers. Since the architecture was deployed, the Mint's customers have experienced few delays.

C. The Website Today

Much like other organizations coming of age in the new e-commerce era, the Mint's web group, now named the Office of Electronic Business (OEB) strives to improve all aspects of the website from finding better ways to use and enhance the architecture and back-end systems to developing strong programming, quality assurance, creative, and management teams. Challenges include working to ensure the site is accessible to those with disabilities, confirming to the public information provided for completing transactions is both secure and kept private, meeting requirements for paperwork elimination and information collection, and making the website a safe place for children to visit (specifically meeting the Children's On-line Privacy Protection Act of 1998 (COPPA)).

Has the Mint found a better solution to the problems of poor communication channels and a cumbersome distribution system? Peers seem to think, "yes" as the Mint, in the August edition of CIO Magazine was recently named one of the top 100 companies that have formed a close alliance with its customers.

Bibliography/Webliography

[Friel, Brian, "Net Smart", Government Executive Magazine, 12/08/99.](http://www.governmentexecutive.com/features/1199/1199s3.htm)
<http://www.governmentexecutive.com/features/1199/1199s3.htm>

[Hasson, Judy, "Coin sales showing U.S. Mint the money", Federal Computer Week, 02/02/00.](http://www.fcw.com/fcw/articles/2000/0131/web-coin-02-02-00.asp)
<http://www.fcw.com/fcw/articles/2000/0131/web-coin-02-02-00.asp>

[Lunney, Kellie, "Top U.S. Mint officials honored for making change", Government Executive Magazine, 04/03/00.](http://www.governmentexecutive.com/dailyfed/0400/040300m1.htm)
<http://www.governmentexecutive.com/dailyfed/0400/040300m1.htm>

[Muio, Anna, "Mint Condition", Fast Company, Issue 30, page 330.](http://www.fastcompany.com/online/30/usmint.html)
<http://www.fastcompany.com/online/30/usmint.html>

[Varon, Elana, "Mint site makes money, The agency's electronic catalog brings in business", Federal Computer Week, 08/09/99.](http://www.fcw.com/fcw/articles/1999/FCW_080999_935.asp) http://www.fcw.com/fcw/articles/1999/FCW_080999_935.asp

[Join Our Team, http://www.usmint.gov/join_our_team/](http://www.usmint.gov/join_our_team/)

Footnotes

- 1 http://www.usmint.gov/join_our_team/
- 2 <http://www.governmentexecutive.com/dailyfed/0400/040300m1.htm>
- 3 <http://www.governmentexecutive.com/features/1199/1199s3.htm>
- 4 <http://www.fastcompany.com/online/30/usmint.html>
- 5 <http://www.fcw.com/fcw/articles/2000/0131/web-coin-02-02-00.asp>
- 6 http://www.fcw.com/fcw/articles/1999/FCW_080999_935.asp

[Go to top](#)

Questions or comments, send e-mail to: [Erin Weinman at weinman@patriot.net](mailto:erin.weinman@patriot.net)
This case study was written on October 29, 2000 for John Hopkins University,
Advanced Web Design