Streamlining the Process: How to Standardize Invoicing Requests from the Revenue-Generating Programs at the Department of Archives & History

Sheila F. Clause
South Carolina Department of Archives & History

March 10, 2008
S. C. STATE LIBRARY
AUG 22 2008
STATE DOCUMENTS
Overview

The mission of the South Carolina Department of Archives & History is to preserve and promote the documentary heritage of the State of South Carolina. The Agency strives to accomplish this mission through a number of programs including historic preservation, archives and record management, history education, and by offering public access to the State’s historic documents through our reference room.

Funding for many of these programs is provided by the State of South Carolina and the agency also receives a number of federal grants. To further our goals of preserving records, recognizing state historic sites and providing access to our records, the agency has a number of departments dedicated to generating revenue to support our programs. The four revenue-generating departments are: 1) publication sales, 2) facility rental, 3) microfilming and duplication, and 4) document photocopy.

Problem Statement

As the amount of State money allocated to the Archives has dwindled, the agency has become more dependent on these four areas of revenue generation. The Archives continually counts on generated revenue to supplement state funding and to provide the services which the agency is mandated to perform, as well as to provide access to the Archives collection. These areas actually generate approximately 10% of the agency’s overall budget.

The lack of standardization in the invoice process has caused problems for the Archives for a number of years. The four department’s differing systems for invoice request have wasted countless hours within the Archives and especially in the area of Budget & Finance. For example, in one Archives department, the process is not even computerized
and forms are being done by hand. This presents a challenge to Budget & Finance in deciphering the information. Also, there are two different invoice request forms being used within the photocopy department. Another issue is that one of the revenue-generating areas is not delivering the invoice requests in time for Budget & Finance to generate invoices on their bi-monthly schedule (the first and fifteenth of each month). If the processes were to be standardized, and requests were generated and available to email to Budget & Finance, staff time in processing the requests could be reduced.

The overall objective of the project will be to determine if using a standard or similar Access database would be more efficient for invoice request reporting to the Budget & Finance department. Efficiency would be reflected in reduced staff time and cost within all four departments, less human error, and faster processing time for invoices issued by Budget & Finance.

The primary data needed is the evaluation of the current invoice request processes at the Archives. There are three different databases/formats used to inform the Budget & Finance department of invoices needed. Ideally, if the four departments could put invoice requests in the same format or same type database, it would make the invoicing process significantly faster, more efficient, and more reliable.

Data Collection

The goals of the data collection are to find steps in the processes in these departments which can be streamlined and made more uniform throughout the divisions. The investigator will need to determine how each of the areas process requests for product/service sales invoicing and evaluate the different methodology. Also, the investigation will determine how the Budget & Finance department receives information and
puts it into invoice format. Methods will include personal interviews, flow charting the processes and evaluation of software access potential, database existence and personnel capabilities in each department.

Sources of this data will be personnel in all areas involved, sample database reports, information captured on handwritten forms and Budget & Finance invoices and reports. By researching each department’s process, the investigator will try to determine and evaluate potential ways to standardize, and in some cases streamline, the invoice request process.

**Data Analysis**

With documentation of each revenue department’s process, one can analyze the steps leading up to delivery of an invoice request and identify areas where there are differences and similarities in the format of the reporting procedures. The general billing environment flow chart (Appendix B) shows the basic reporting path for an invoice request from each department as it goes to Budget & Finance. For those areas using a database, the investigator will interview the users and seek ways to build a database for the other departments which would allow them to report to Budget & Finance in a similar manner. In order to be sure that each unit is working with the same type of information and terms, it was necessary to develop a list of operational definitions (Appendix A) for referencing each unit’s process.

**Implementation Plan**

One of the reasons that this issue of standardization has not been investigated in the past is the challenge of getting staff to do things differently than they “have always been done.” In the past year, there have been personnel changes in the agency in two of the areas
involved in the invoicing process. One of the new staff positions is the Budget & Finance manager. Her priorities include streamlining other finance processes and systems as the Archives transitions to the new South Carolina Enterprise Information System (SCEIS). Moving forward with these changes should make it easier to get buy-in from the staff working in the revenue areas and also the managers over these areas. Their support is necessary for the departments to see these savings in human resources as a part of the overall cost saving goals of the agency.

The data will be gathered through the analysis of each department’s processes and show how each department gathers information to send to the Budget & Finance department (Appendices C - G). Differences and similarities will be noted and interviews with personnel will determine whether standardizing into similar databases would be feasible. Examples of two different invoice request forms can be found in (Appendices H and I). These two examples show forms from an area that currently generates the invoice request through an Access database (Appendix H) and an area which generates the information by filling the information out by hand (Appendix I).

The timeframe of this project would need to be determined by personnel in all four units, as well as Budget & Finance, with input from the Archives’ Information Technology department. We would need to determine database creation possibilities, personnel training and time needed to coordinate the standardized processes.

The costs of this project would mainly be human resource costs. The database software is already available to the agency. Thus, the cost involved would be the staff time to actually build or adapt the database for each department, then to train staff to use it.

Potential obstacles to the standardization and database design could be in individual’s hesitancy to learn new skills and change the old way of doing things. Using
current database forms and reports as examples may convince staff that the electronic
generation of the invoice requests are more reliable and less time consuming than current
methods.

If the data shows enough similarities to make it feasible for all four units to use a
database, getting the key stakeholders to accept changes will be crucial. It will be important
to be sure each unit has input and is not made to feel that they have been singled out as an
area that needs improvement.

**Evaluation Method**

If the comparison of processes shows that a similar database for each unit would be
beneficial in cutting costs, there are a number of ways to measure results. Tracking time it
takes individual staff to fill out an invoice request is one measure. Tracking time between
invoice requests and time of actual invoices issued will also be an indicator. This can be
used to determine whether the standardization of invoice requests is saving time in the
Budget & Finance department as well as in the areas of revenue generation.

The agency could use a three month period to track staff time in issuing invoice
requests with the process each department is currently using. During this time the
information technology department could work on the Access databases for each area. Staff
could be trained to use the database to issue the invoice requests and send them to Budget &
Finance via email. When the areas are able to use the database for processing their requests,
the agency would track a three month period and compare to the previous three months.
The agency should expect to shorten the cycle time from invoice request to actual invoicing.
Summary

Once each of the department’s processes is analyzed step-by-step, the investigator can determine whether there are enough similarities in the way each department assimilates its information. If the product/service description, pricing, customer information, etc. can be captured in a similar database, this could justify a database which would generate reports which would look alike and provide all the information needed by Budget & Finance to process an invoice. The invoice requests generated by the Access databases could be emailed to Budget & Finance at least two days prior to the next invoicing date. The email would serve as an authorization to invoice. All of these changes would lessen the time spent inputting information by area (from hand writing to data entry), standardize request forms to reduce error in input on the part of Budget & Finance, reduce physical transport of paperwork, reduce paper and printing costs, and ultimately decrease turnaround time for getting invoices out to collect payment.

Recommendations for Implementation Plan

Implementation Proposal and Timeframe:

Step 1-

The first step in getting the proposed project moving would be to have a meeting involving all of the department managers who oversee an area that generates revenue for the agency. At this meeting, the proposal would be discussed and the goal would be to get all of these managers “on board” in realizing that human resource cost could be decreased, accuracy and timeliness of reporting could be improved, and ultimately the receivables for the agency could be secured faster.

Proposed Time frame – One meeting between May 1 and June 15, 2008
Step 2-

After securing support for pursuing this process improvement, the staff in each of the five departments would meet and further detail each of their process flows in getting an invoice request to Budget and Finance. This would include assigning a time frame to each step and the total time required to generate the invoice information. The thorough look into each process would give us the information on what similarities and differences are involved and whether the Access database in existence could be adapted and used in each department. Also at this time, Budget and Finance would begin to track the time taken to issue invoices based on the current system, so that this information could be compared to the new system once it is underway.

Proposed Time frame – Two meetings between June 15 and July 15, 2008

Step 3-

If it is determined that the departments will all be able to adapt the database to fit their needs, the information technology software staff will be briefed and asked to meet with each department. These staff members will work with each department on what is needed to develop forms and reports within the database which can be used to generate a “universal” invoice request document to Budget & Finance. The technical staff would then customize databases for each department.

Proposed Time frame – Information technology staff working with departments between July 15 and September 1, 2008

Step 4-

Once an adapted database is created for each department, training may be needed in some departments to get the key people who produce invoice requests to learn the Access database and how to fill out the forms, use the tables and generate the invoice
request form. Some employees may need to take an Access refresher course, while others will just need to get familiar with the particular tasks of the database. Throughout this time, each department's staff could work together to share knowledge, find solutions, and answer questions experienced during the process of learning the new procedures.

Proposed Time frame – Depending on needs of individual department personnel, between September 1 and October 15, 2008

Step 5-

The next step in this process would be to establish the invoice billing date that each area would submit their newly designed invoice request to Budget and Finance. At this point, the departments would gather and discuss the successes and challenges of the uniformity of the invoice request process.

Proposed Time frame – Invoice requests submitted electronically to Budget and Finance at least two days before October 15 invoicing date

Step 6-

Once the first set of invoices were issued using the new invoice request form, Budget and Finance would track the time it takes to issue invoices based on the new system. After a three month period, this information would be compared to the information gathered while using the old system and the possible differences would be reviewed.

Proposed Time frame – October 15, 2008 through January 15, 2009
APPENDIX A

Operational Term definitions:

• **Accounts Payable**
  Our agency's pending payment for goods/services received.

• **Accounts Receivable**
  A customer’s account (invoice) where payment is pending.

• **Billing Cycle**
  Time period for which customer is being invoiced.

• **Billing Summary**
  Work order summary documenting services and products for which we seek payment (work order/product order).

• **Customer**
  Persons/ Business requesting our services/products.

• **Deposit**
  Documentation of funds transferred to bank; Partial payment for goods and services pending.

• **Discount**
  Reduction or percentage of standard or total sale/cost.

• **FEIN Number (Fed. I.D. Number)**
  Required for payment.

• **GAAP**
  Generally Accepted Accounting Principles.

• **Invoice**
  Bill sent to customer requesting payment for services/products.

• **Invoice Number**
  Control number sequentially assigned to invoices.

• **Invoice Request**
  To let Budget & Finance know who what, where to bill.

• **Payment**
  Funds received for our goods/services.

• **Product**
  The end result services provided.
• **Purchase Order**  
  Control number sequentially assigned to service/product request.

• **Receipt**  
  Transaction/documentation of funds received or issued to customer for payment of goods/services received.

• **Revenue**  
  Funds generated or received (from external source).

• **Revenue Processing**  
  How funds get from customer to accounting system.

• **SAAS**  
  State Automated Accounting System (our internal system).

• **Service**  
  Work performed for a fee.

• **Work Order**  
  Documentation of services and/or product.

• **Work Order Number**  
  Control number (internal) assigned to order (external).
APPENDIX B
Billing Flow Chart

Process Environment for Billing System

Work/Product Request Comes In

Department Confirms Information

Work Done and Invoice Request Prepared

Invoice request to Budget & Finance

Additional information (if needed) to Budget & Finance (i.e. billing summary, contract, etc.)

Invoice produced by Budget & Finance

Reconciliation reports prepared

Deposits made

Budget & Finance Revenue Processing

Payment from Customer

Invoice mailed after Service or Product Delivery
APPENDIX C

PROCESS FLOW
Receivables - Budget & Finance

One day is required to process, print and mail customer invoices.

Budget & Finance receives request for issuance of invoice from billable service areas.

Billing information entered into internal accounts receivable system.

Accounts receivable system generates pre-printed invoice form.

Invoices issued twice a month.

Invoices mailed to customer with attached backup information from work unit.

Send unit back an “invoices issued” report so unit has invoice number for referencing purposes.

Invoice information is entered into SAAS. Data entered includes: name, company, invoice number, and amount.

Payments are received.

If payment is sent in with yellow portion of invoice which has invoice # and person billed then it is posted to proper account.

Payments are logged.

Payments posted to SAAS and internal accounts receivable.

Monthly “invoices paid” reports go to individual units to advise them what has been paid.
Budget & finance sends monthly reports of outstanding payments to unit.

Deposit forms are generated by SAAS.

Deposits are taken to bank. (2X weekly) Bank validates 2 receipts – one is taken to the state treasurer's office and one goes into the Budget & Finance file.
APPENDIX D

PROCESS FLOW
Facility Rental

Three day processing time is allowed for contract to be sent to customer.

Customer requests a meeting space.

Facility Manager quotes price to customer and verifies availability.

Facility Manager completes event reservation requirement form. Includes customer and billing information and needed resources.

If space/cost is okay Facility Manager sends facility rental contract to customer.

Signed copy of contract is sent back to facility manager for confirmation of event date.

Event takes place.

Facility Manager amends cost based on “real” usage. Billing information is put into Access database. Information includes: name, company, address, rental date/s, cost, etc.

Invoice request is generated from database.

Facility Manager sends invoice request to Budget & Finance which breaks down costs, gives customer and billing information, and P.O. number (if available).

Budget & Finance send copy of invoice to customer.

Once check has come from customer, Facility Manager gets a copy of the invoice, and copy of check from Budget & Finance.
Monthly reports on invoice lists and receivables come to Facility Manager from Budget & Finance.
APPENDIX E

PROCESS FLOW
Microfilm

Time will fluctuate based upon the number and size of orders received. Volume of work varies greatly in this area and depends on size of microfilming job and number of orders in process.

Customer requests service and work order is completed with customer information and services needed

Technician takes work order and competes the requested service.

When requested work is complete, the technician enters work order information into the Access database. Database information includes customer name & billing information, services completed, cost of services.

Invoice request is generated from database on the 15th of each month.

Invoice request is reviewed and administrative fees are assessed and a billing summary is generated.

Micrographics sends invoice request to Budget & Finance and includes break down of service and administrative costs. Invoice request supplies all customer and billing information.

Budget & Finance send copy of invoice and billing summary to customer.

Once check has come from customer, Micrographics gets a copy of the invoice, and a copy of check from Budget & Finance.

Monthly reports on invoice lists and receivables come to Micrographics from Budget & Finance.
APPENDIX F

PROCESS FLOW
Publications

Time will fluctuate based upon the number and size of orders received. Three day processing time is required for orders to be shipped.

Customer places publications order via mail, telephone, fax, or e-mail.

How orders are processed:
- Credit card orders (mail, phone, fax, e-mail) must be authorized; daily credit card total is routed to Budget & Finance.
- Mail orders are received by Budget & Finance and payment is removed for deposit, orders dated and routed to Publications Coordinator.

Order information is put into database. Database information includes: name/address of customer, publication information, and quantities.

Packing slips and labels are printed, publications packaged, taken to mail room for shipping.

Invoice request is generated from database.

Publications Coordinator sends invoice request to Budget & Finance which breaks down book costs, shipping costs and gives customer and billing information.

Budget & Finance send copy of invoice to customer.

Once check has come from customer, Publications Coordinator gets a copy of the invoice, and copy of check from Budget & Finance.

Monthly reports on invoice lists and receivables come to Facility Manager from Budget & Finance.
APPENDIX G

PROCESS FLOW
Photocopy

Photocopy Reference Room On site requests

2 week processing time for orders. Time will fluctuate based upon the number and size of orders received.

Customer's order is received via reference room.

Customer completes ID information on the work order form.

Reference reviews form and then calculates and collects the appropriate cost for the order.

The “Archives Use” section of the form is then completed and placed in a box for orders to be processed.

From the completed form, the staff member then locates the appropriate film/documents and then forwards to photocopy for completion.

Photocopy staff then completes order. Copies are either mailed or left at the reference desk for patron pick up.

Photocopy Phone/Email requests

7-10 day processing time with same fluctuation rule.

For an additional fee, researches may answer email, phone and mail requests.

Reference staff members locate information for patron using quote system in Access.

Quotes are then mailed to the patron requesting payment if information is available.
If they wish to submit their request for photocopy, payment (credit or check) is sent via mail.

Once received by Finance, all check requests are processed and the quote sheet forwarded with "paid" noted.

All credit card requests are processed by Reference.

Procedure is then followed above for the completion of the order (film pulled, order filled, and mailed with receipt).

**Phone/Email requests for CD format**

Order is processed upon request on an individual basis. Approximate time would be two weeks.

Request is initiated with Reference via reference room, phone, email or regular mail.

Photocopy Order form then completed and sent for order.

Invoice request sent to finance for issuing of invoice number.

Order completed, mailed and billed.

Payment applied by finance.
Phone/Email requests for Charter Records

Complete process is one month.

Request made by patron/organization for copy of charter.

Hard copy form completed and order pulled and copied by Reference staff.

Data entered in Access database for billing at the end of month.

End of month, bills are printed, forwarded to finance for invoice numbers, and mailed by finance for payment.

Monthly billing copies also filed in Reference.
APPENDIX H

Facility Rental Invoice Request

2/5/08

This is not an Invoice

For Service Inquiries:
803-896-6124
ATTN: Sheila Clause

SC DEPARTMENT OF ARCHIVES AND HISTORY

Facility Rental
8301 Parklane Road
Columbia, SC 29223

xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx
Attention: xxxxxxxxxxxxxxx
xxx Main Street - Suite xxx
Columbia SC 29201

<table>
<thead>
<tr>
<th>Event Date</th>
<th>Service</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>1/25/08</td>
<td>Rental of Wachovia Rooms I &amp; II</td>
<td>$350.00</td>
</tr>
</tbody>
</table>

Sub Total    $350.00
Deposit      $0.00

$350.00

Sheila Clause,
Facility Coordinator
APPENDIX I

Photocopy Invoice Request

South Carolina Department of Archives and History
8301 Parklane Road • Columbia, SC 29223
(803) 896-6104 Fax: (803) 896-6198

In-house Photocopy Order Form

To:

Date

Attention Researcher: Archives Reference Staff must fill in all reference information needed below to complete this form. Order forms completed by researchers cannot be accepted. All photocopy orders must be prepaid in order to be processed. Please allow up to ten business days for photocopy orders to be processed. The Archives for its records will retain this form. If you wish to receive a copy of this form you may use the self-service Xerox machine located in the Reference Room to obtain a copy.

<table>
<thead>
<tr>
<th>Description</th>
<th>Reference</th>
<th>Roll No.</th>
<th>Pages</th>
<th>Copies</th>
<th>Prints</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* All Xerox items on Xerox hold shelf

No. Prints from this page

For Archives Use Only

Receipt No.

Copies Picked up/ Mailed on

Certification Requested

Order Taken By

Acknowledging Receipt of:

No. Prints from all Pages

Handling/Mailing Charge

Total Amount Due

$